Express Mail Label No. EL 935282235 US
Docket No.: S1022. 81244US00
Mailed: May 13, 2005

Amendments to the Written Description of the Specification

Applicant presents replacement paragraphs below indicating the changes with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

On page 1, after the title insert: --Background Of The Invention--;

On page 1, after "Background of the Invention" but before the first paragraph insert: --1. Field of the Invention--;

On page 1, before the second paragraph beginning on line ~~10~~ 6, insert --2. Discussion of the Related Art--;

Please amend the three paragraphs beginning on page 1, line 6 through page 2, line 3, as shown below:

--Fig. 1 schematically shows an integrated circuit 10 comprising a microprocessor (μP) 12, an internal memory (MEM) 14, and input/output terminals (I/O) 16. Microprocessor 12 is intended to execute a program or [[a]] software stored in memory 14. Under control of the program, microprocessor 12 may process data provided by input/output terminals 16 or stored in memory 14 and reading or writing data through input/output terminals 16.

To check the proper operation of the microprocessor, a monitoring circuit 18 is generally integrated ~~to~~ on integrated circuit 10. Monitoring circuit 18 is capable of reading specific data provided by microprocessor 12 on execution of a program, and of possibly performing a processing on the read data. Test terminals 22 connect monitoring circuit 18 to an analysis tool 24. Analysis tool 24 may perform a processing of the received signals, for example, according to commands provided by a user, and ensure a detailed analysis of the operation of microprocessor 12. In particular, analysis tool 24 may determine the program instruction sequence really executed by microprocessor 12.

The number of test terminals 22 for a conventional monitoring circuit 18 may be on the same order of magnitude as the number of input/output terminals 16 of microprocessor 12, for example, from 200 to 400. Test terminals 22 as well as the connections of monitoring circuit 18 take up a significant silicon surface area, which causes an unwanted increase in the circuit cost.